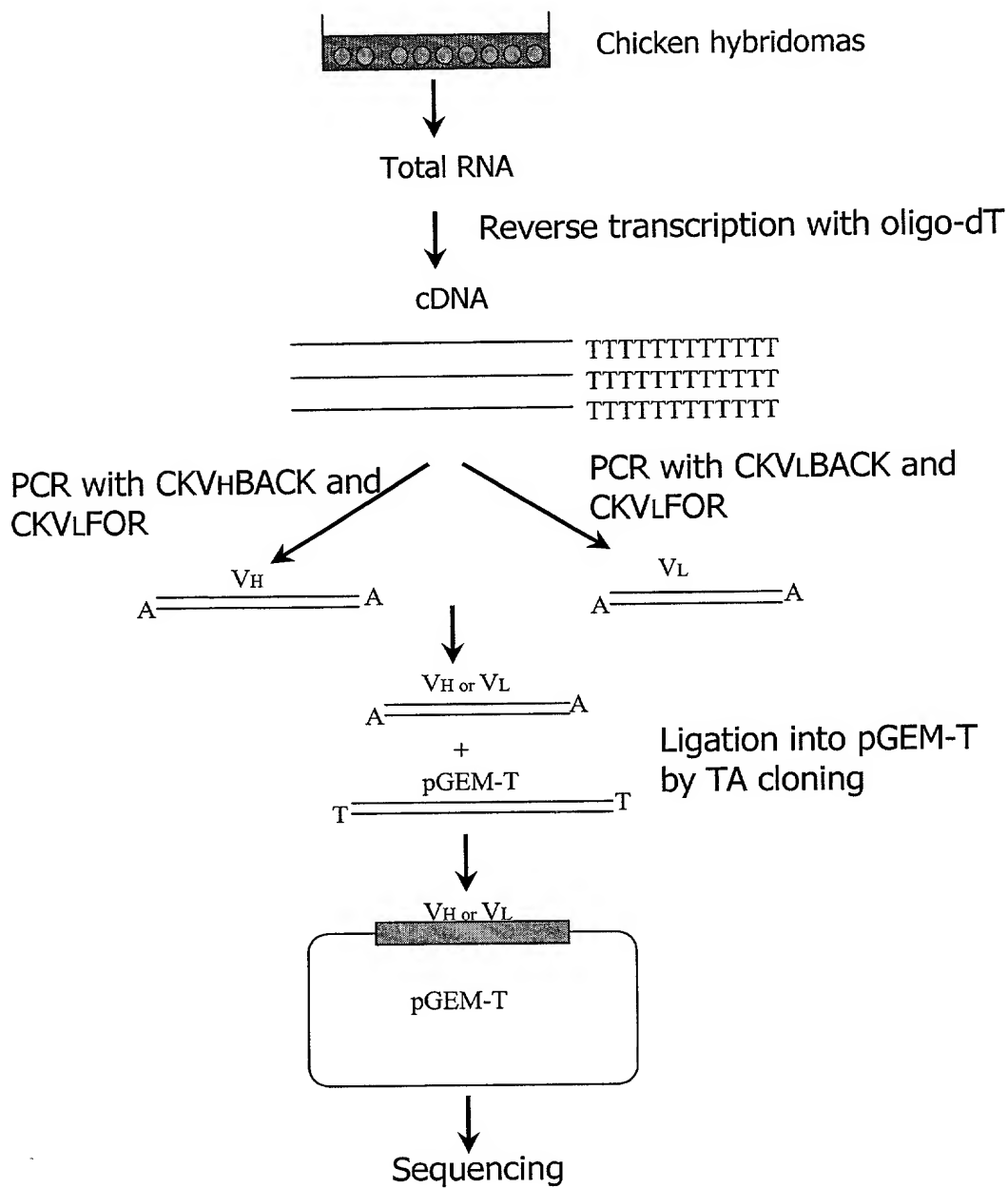


1/16

Fig. 1



2/16

Fig. 2

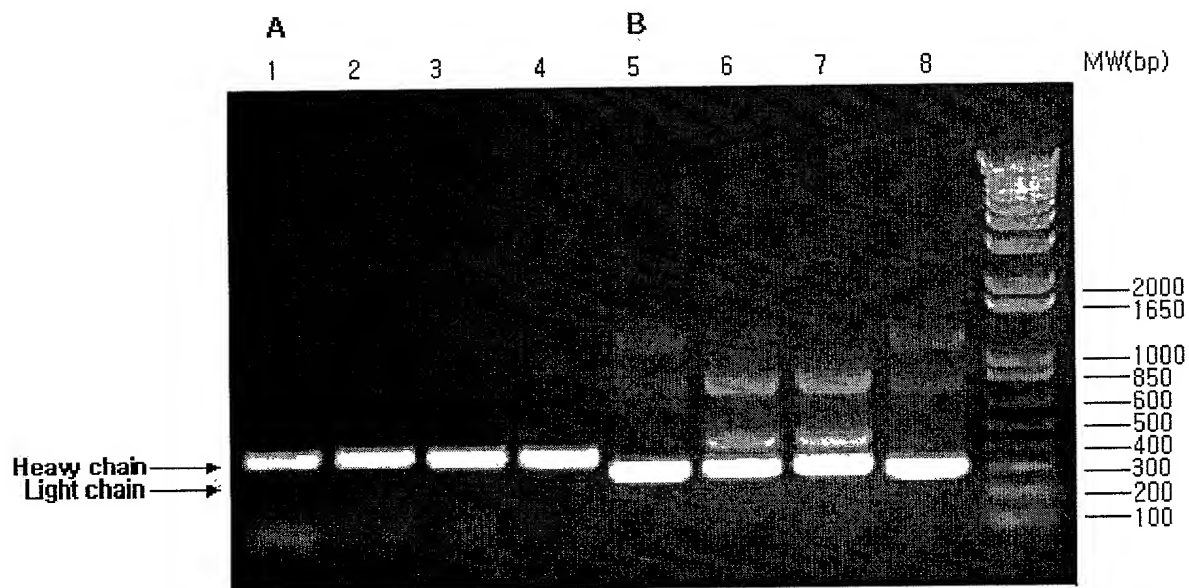


Fig. 3a

GERMLINE	<u>GCCGTGACGTTGGACGAGTCCCGGGGCCGCCTCCAGACGCCCGGAAGAGC</u>	50
	CKVHBACK	
2-1HC	..... G....	50
5D11HC	..... G....	50
13C8HC	..... G... G	50
8C3HC	..... G.. G	50
GERMLINE	<u>GCTCAGCCTCGTCTGCAAGGCCTCCGGGTTCACCTTCAGCAGTTACAACA</u>	100
	CDR1	
2-1HC	..... CC.TGG..	100
5D11HC	..... GA..... G.	100
13C8HC	..... G..... C.GA..... TGC..	100
8C3HC	..... T.TA . G . G..... T.	100
GERMLINE	<u>TGGGTGGGTGCGACAGCGCCCCGCAAGGGCTGGAGTTCGTCGCTGGT</u>	150
2-1HC	.. ATG..... A..... GG..... G..	150
5D11HC	.. AT..... A.A..... G..	150
13C8HC	..... A..... A..... G..	150
8C3HC	.. CAC..... C. . A. . T. . A. . . . A.A. . T. . A. .	150
GERMLINE	<u>ATTGAC---AACACTGGTAGATACACAGGCTACGGGTCCGCGGTGAAGGG</u>	197
	CDR2	
2-1HC	... AG. --- CT..... GTA..... C.C.....	197
5D11HC	... AGA--- GTGA..... TAG . T. TA..... G.....	197
13C8HC	... A. AAAA. TGA..... T. GG. . AA..... C.C.....	200
8C3HC	..... T---GCTGG. ... G. TAG. ... TA..... G..... C.....	197
GERMLINE	<u>CCGTGCCACCATCTCGAGGGACAACGGGCAGAGCACAGTGAGGCTGCAGC</u>	247
2-1HC	..... TC.....	247
5D11HC	..... A.....	247
13C8HC	..... G..... C.....	250
8C3HC	..... G..... C.....	247
	VH1 gene	
GERMLINE	<u>TGAACAACCTCAGGGCTGAGGACACCGGCACCTACTACTGCGCCAAGCT</u>	297
2-1HC	..... G.....	297
5D11HC	..... T..... AG.....	297
13C8HC	..... C..... T..... GT..... A. . G. . A.	297
8C3HC	..... CTG..... T.....	297
	D segment JH gene	
GERMLINE	<u>GCTGGTNNNNNNNNNNNNNNNNNNNN--ACTGCTGGTAGCATCGACGC</u>	341
	CDR3	
2-1HC	. G. . C. TATTGTGCTGGT-----TG. . G. . . GA.	335
5D11HC	T. . TA. GGTAGTTGGAGAGGT-----T. . A. . . . GA.	338
13C8HC	. T. AA. AGTGGTTACCCT-----GA. C. GA.	338
8C3HC	T. . C. GTGTGGCTATGATTGGTGT-----T..... A. . A.	341
GERMLINE	<u>ATGGGGCCACGGGACCGAAGTCATCGTCTCTCTCC</u>	375
	CKVHFOR	
2-1HC	.....	369
5D11HC	.....	372
13C8HC	.....	372
8C3HC	.....	375

4/16

Fig. 3b

GERMLINE	← GCGCTGACTCAGCGTCTCGGTGTCAGCGAACCCGGGAGGAACCGTCAA 50
	CKVLBACK
2-1LC	..... A. A. A. 50
5D11LC	..... A. T. A. G. 50
13C8LC	..... A. T. 50
8C3LC	..... A. T. A. G. 50
GERMLINE	GATCACCTGCTCCGGGGATAGCAGCTAC-----TATGGCT 85
	CDR1
2-1LC	..... G. G. GCTGGAAGTTACTAT. 100
5D11LC	A. GC. . GTATAGG----- 85
13C8LC	..... GC. . TATGG. ----- 85
8C3LC	..... G. . A. . A. . ----- 85
GERMLINE	GGTACCAGCAGAAGGCACCTGGCAGTGCCCTGTCACTGTGATCTATGAC 135
2-1LC	..... C. 150
5D11LC	..... T. T. 135
13C8LC	..... T. T. C. CTGG 135
8C3LC	..... T. AT. CT. . 135
GERMLINE	AACACCAACAGACCCTCGAACATCCCTTCACGATTCTCCGGTTCCAAATC 185
	CDR2
2-1LC	..... CT. . . 200
5D11LC	..... GA. . G. G. 185
13C8LC	..... A. . G. G. 185
8C3LC	..... A. . G. G. C. 185
GERMLINE	CGGCTCCACAGCCACATTAACCATCACTGGGGTCCGAGCCGACGACAATG 235
2-1LC	..... AA. A. . T. G. G. G. 250
5D11LC	..... A. G. G. A. G. G. G. 235
13C8LC	..... G. . A. G. A. G. G. G. 235
8C3LC	..... AA. G. G. G. 235
	Vλ 1 gene
GERMLINE	CTGTCTATTACTGTGCGAGTACAGACAGCAGCAGTACT-----GCA-----GGTATA 282
	CDR3
2-1LC	..... G. . CTC. TTA. GT. ----- 294
5D11LC	..... G. . A. G. A. . AT. C. TAC-----AT-----CC. . . 282
13C8LC	..... G. . A. G. A. TGATAGTGATTATGTT. 294
8C3LC	..... T. GTGCCTGG. . A. . T-----C. . ATTTAT. TT----- 285
	Jλ gene
GERMLINE	TTTGGGGCCGGGACAACCCTGACCGTCCTA 312
	CKVLFOR
2-1LC	C. 324
6D12LC	..... 309
5D11LC	..... 312
13C8LC	..... 324
8C3LC	..... 315

Fig. 3c

[illegible]

6/16

Fig. 3d

Germline	CGCGTGA	CTCAGCGGTCCTCGGTGTGTCAGCGAACCCGGGAGGAAACCGTCAAGATCACCTGCTCCGGGGATACAGACTACTATGGCTGGTAC	CAGAGGACACCTGGCAGTGC	105
6D-12-G10	*****Primer V _{1B} *****	*****A*****T*****AG***TG**AG*****T*****	*****	
Germline	ACTGTGATCTATGACAAACACACAGACACCTCGAAATCCCTTCACGATTC	CCGGTCCCAATCCGGCTCCACAGCCACATTAACCATCACTACCTGGGTCCGAGCGACGACAAATGCTGTC		225
6D-12-G10	*****T*****GA***G*****G*****	*****G*****G*****	*****G***G*G*****	
Germline	TATTACTGTGCGAGTACAGACAGCAGTACTGCAGTATATT	TGGGGCGCGGACACCTGACCGTCTTAGGT	315	
6D-12-G10	*****A*****TA***T*****	*****A*****	*****	

7/16

Fig. 4a

Germline	AVTLDESGGGLQTPGRALSLVCKASGFTFSSYNMGWVRQAPGKGLEFVAG	50
	CDR1	
2-1HC	.....G.....HG.M....T....W...	50
5D11 HC	.....G.....D....D.I.....Y...	50
8C3 HC	.....GG.....SIGG.I.H....T....Y...	50
13C8 HC	.....GG.....G.LD....A.....	50
Germline	<u>IDNT-GRYTGYGSAVKGRATISRDNGQSTVRLQLNNLRAEDTGTYCAKA</u>	99
	CDR2	
2-1 HC	.S...T...Y.AP.....-	98
5D11 HC	.RSD-.SSIY..A.....L.....S	99
8C3 HC	..AG-.GS.Y..A..Q...V.....L.....F...	99
13C8 HC	.KKND.SW.N.AP.....D...I.V.TRD	100
Germline	<u>AGXXX--XX-----XTAGSIDAWGHGTEIVSS</u>	124
	CDR3	
2-1 HC	-GGAY--CA-----GCG.D.....	122
5D11 HC	---SY-----GSWRGST.D.....	123
8C3 HC	SRCGYDWCS-----DN.....	124
13C8 HC	VNSGY-----PD.AD.....	123

8/16

Fig. 4b

Germline	ALTQPSVSANPGGTVK|TCSGDSSY-----YGWYQQKAPGSAPVTVIY	44
	CDR1	
2-1 LC	.....E.....GG..AGSY.....A.....	49
5D11 LC	.....L..E..E.....GRYR.....SS.....	44
8C3 LC	.....I..E..E.....GNN.....S.....	44
13C8 LC	.....L.....G-----SYG...F...S.....P...	44
Germline	DNTNRPSN|PSRFSGSKSGSTATLT|TGVRADDEAVYYCASTDSSST---	91
	CDR2	CDR3
2-1 LC	.....L....N.....QVE.....G..F...YV---	94
5D11 LC	..DK...D.....D..G.....Q..E.....GNA..NTY---	91
8C3 LC	Y..NK...D.....P...N.....E.....F..GAWE...PI---	91
13C8 LC	W-NK...D.....E.....GNA...NTADSD	94
Germline	-AGIFGAGTTLTVL	104
2-1 LC	--..L.....	106
5D11 LC	-DP.....	104
8C3 LC	YV.....	105
13C8 LC	YV.....	108

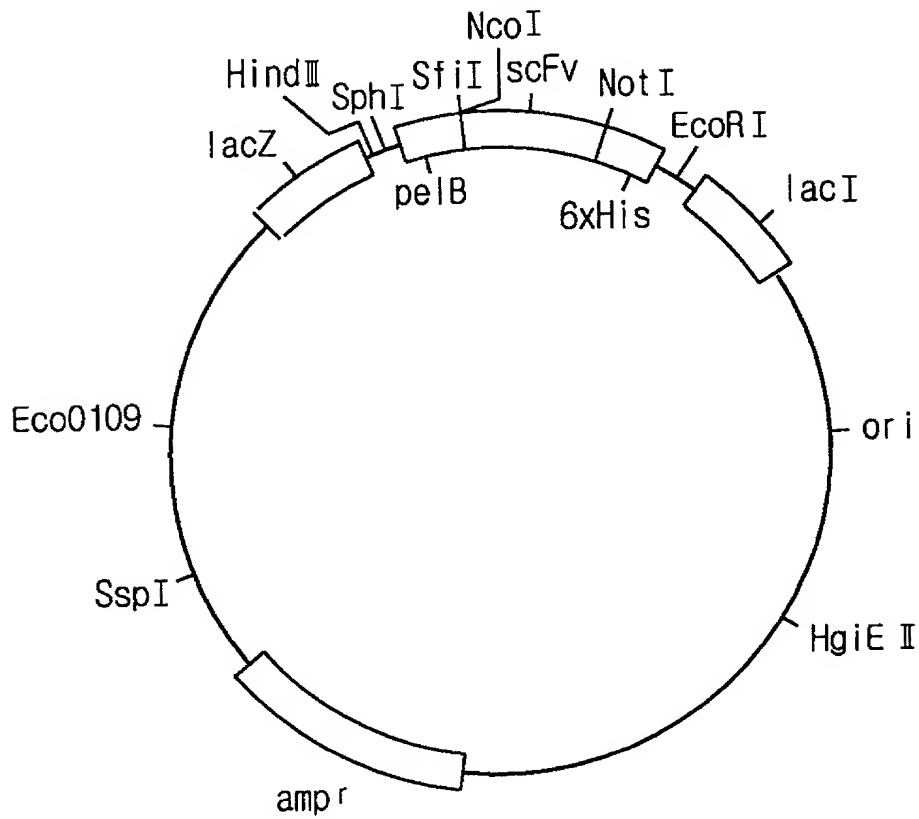
9/16

Fig. 5

Antibody	FR1	CDR1	FR2	CDR2	FR3	CDR3
5D11	ψV4 and ψV2/7/18/23/24	ψV14	ψV7	ψV7	ψV7/12	V12 and V11
8C3	ψV24	ψV23	ψV7	ψV12	ψV7/10/12, ψV2/8/17, and ψV13	ψV13
13C8	ψV4	ψV14	ψV6 and ψV11	ψV14 and ψV12/13	ψV11	ψV12 and ψV20
2-1	ψV4 and ψV5/8/14	ψV8	ψV8	ψV8	ψV8 and ψV14	ψV14 and ψV3

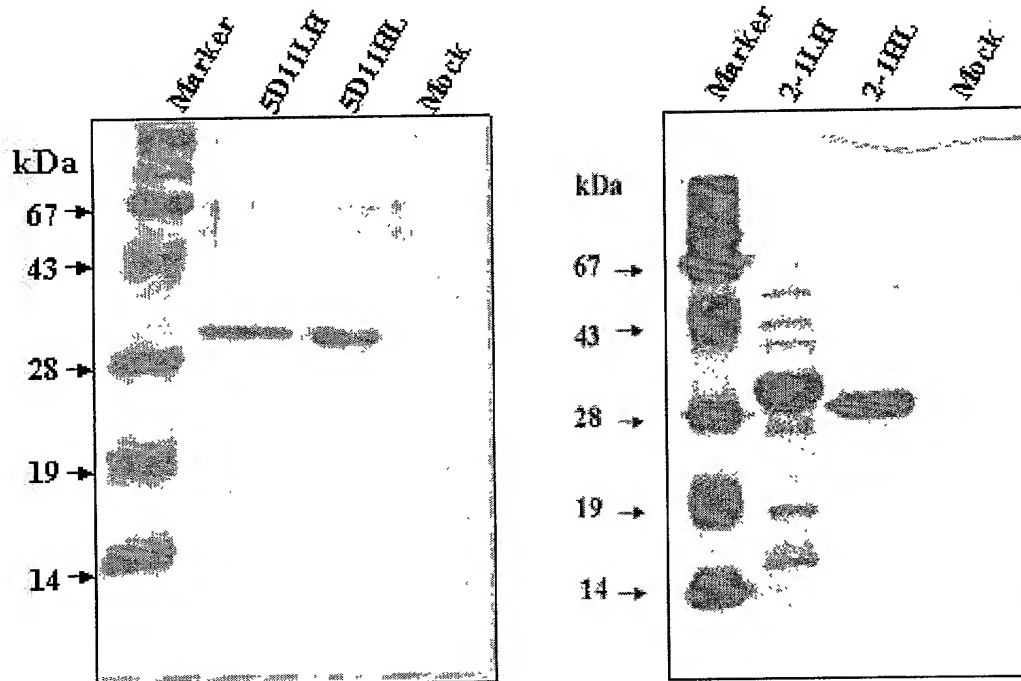
10/16

Fig. 6



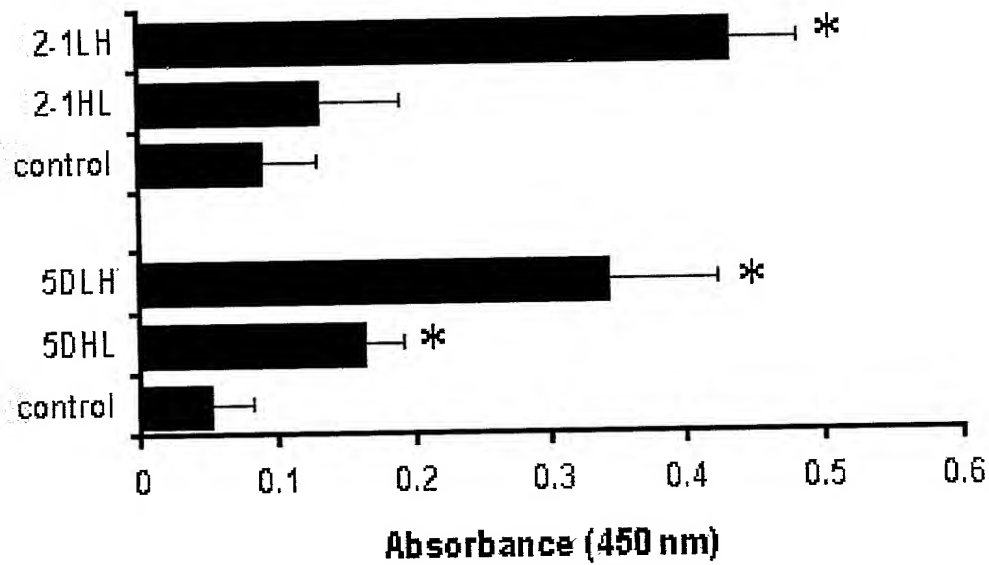
11/16

Fig. 7



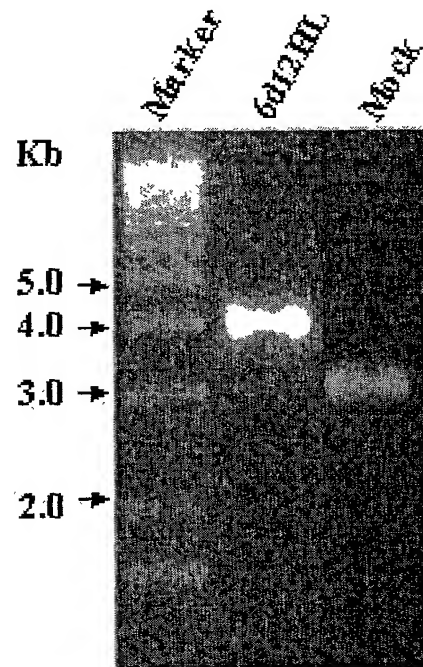
12/16

Fig. 8



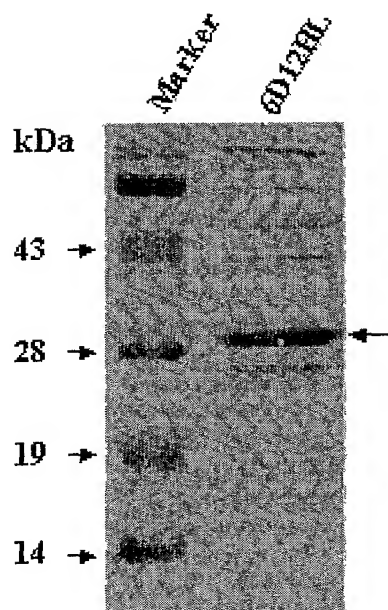
13/16

Fig. 9a



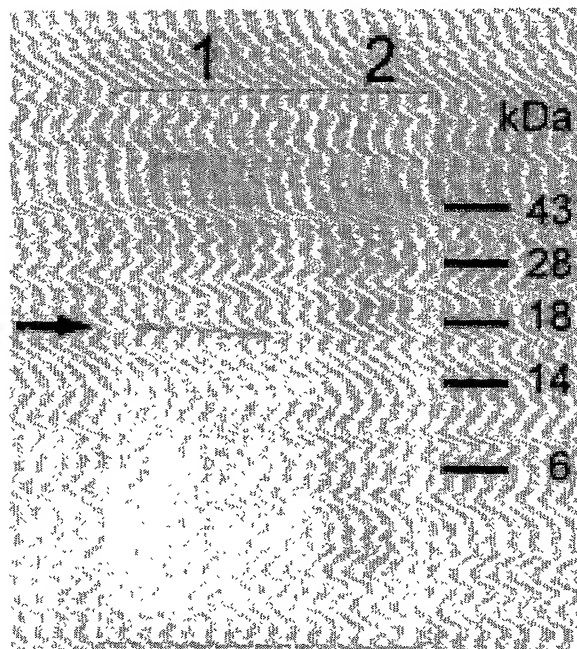
14/16

Fig. 9b



15/16

Fig. 10



16/16

Fig. 11

